

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/023,909C

Source: 1FW/6

Date Processed by STIC: 12/29/06

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:31

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

3 <110> APPLICANT: Davis, Heather L.  
 4 Schorr, Joachim  
 5 Krieg, Arthur M.  
 7 <120> TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING UNMETHYLATED CPG  
 DINUCLEOTIDE AS  
 8 AN ADJUVANT  
 10 <130> FILE REFERENCE: C1039.70058US00  
 12 <140> CURRENT APPLICATION NUMBER: US 10/023,909C  
 13 <141> CURRENT FILING DATE: 2001-12-18  
 15 <150> PRIOR APPLICATION NUMBER: US 09/325,193  
 16 <151> PRIOR FILING DATE: 1999-06-03  
 18 <150> PRIOR APPLICATION NUMBER: US 09/154,614  
 19 <151> PRIOR FILING DATE: 1998-09-16  
 21 <150> PRIOR APPLICATION NUMBER: PCT/US98/04703  
 22 <151> PRIOR FILING DATE: 1998-03-10  
 24 <150> PRIOR APPLICATION NUMBER: US 60/040,376  
 25 <151> PRIOR FILING DATE: 1997-03-10  
 27 <160> NUMBER OF SEQ ID NOS: 99  
 29 <170> SOFTWARE: PatentIn version 3.3  
 31 <210> SEQ ID NO: 1  
 32 <211> LENGTH: 15  
 33 <212> TYPE: DNA  
 34 <213> ORGANISM: Artificial sequence  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Synthetic oligonucleotide  
 39 <400> SEQUENCE: 1  
 40 gctagacgtt agcgt 15  
 43 <210> SEQ ID NO: 2  
 44 <211> LENGTH: 15  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Artificial sequence  
 48 <220> FEATURE:  
 49 <223> OTHER INFORMATION: Synthetic oligonucleotide  
 51 <400> SEQUENCE: 2  
 52 gctagatgtt agcgt 15  
 55 <210> SEQ ID NO: 3  
 56 <211> LENGTH: 15  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Artificial sequence  
 60 <220> FEATURE:  
 61 <223> OTHER INFORMATION: Synthetic oligonucleotide  
 64 <220> FEATURE:  
 65 <221> NAME/KEY: modified\_base  
 66 <222> LOCATION: (7)..(7)

*see p. 6*

## RAW SEQUENCE LISTING

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:31

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

```

67 <223> OTHER INFORMATION: m5c
69 <400> SEQUENCE: 3
70 gctagacggtt agcgt 15
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 15
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Synthetic oligonucleotide
82 <220> FEATURE:
83 <221> NAME/KEY: modified_base
84 <222> LOCATION: (13)..(13)
85 <223> OTHER INFORMATION: m5c
87 <400> SEQUENCE: 4
88 gctagacggtt agcgt 15
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 15
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Synthetic oligonucleotide
99 <400> SEQUENCE: 5
100 gcatgacggtt gagct 15
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 20
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: Synthetic oligonucleotide
111 <400> SEQUENCE: 6
112 atggaagggtc cagcgttctc 20
115 <210> SEQ ID NO: 7
116 <211> LENGTH: 20
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Synthetic oligonucleotide
123 <400> SEQUENCE: 7
124 atcgactctc gagcgttctc 20
127 <210> SEQ ID NO: 8
128 <211> LENGTH: 20
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Synthetic oligonucleotide
136 <220> FEATURE:
137 <221> NAME/KEY: modified_base
138 <222> LOCATION: (3)..(3)
139 <223> OTHER INFORMATION: m5c

```

## RAW SEQUENCE LISTING

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:31

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

```

141 <400> SEQUENCE: 8
142 atcgactctc gagcgttctc 20
145 <210> SEQ ID NO: 9
146 <211> LENGTH: 20
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Synthetic oligonucleotide
154 <220> FEATURE:
155 <221> NAME/KEY: modified_base
156 <222> LOCATION: (18)..(18)
157 <223> OTHER INFORMATION: m5c
159 <400> SEQUENCE: 9
160 atcgactctc gagcgttctc 20
163 <210> SEQ ID NO: 10
164 <211> LENGTH: 20
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Synthetic oligonucleotide
171 <400> SEQUENCE: 10
172 atggaaggctc caacgttctc 20
175 <210> SEQ ID NO: 11
176 <211> LENGTH: 20
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Synthetic oligonucleotide
183 <400> SEQUENCE: 11
184 gagaacgctg gaccttccat 20
187 <210> SEQ ID NO: 12
188 <211> LENGTH: 20
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Synthetic oligonucleotide
195 <400> SEQUENCE: 12
196 gagaacgctc gaccttccat 20
199 <210> SEQ ID NO: 13
200 <211> LENGTH: 20
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Synthetic oligonucleotide
207 <400> SEQUENCE: 13
208 gagaacgctc gaccttcgat 20
211 <210> SEQ ID NO: 14
212 <211> LENGTH: 20
213 <212> TYPE: DNA

```

## RAW SEQUENCE LISTING

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:31

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

```

214 <213> ORGANISM: Artificial sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Synthetic oligonucleotide
220 <220> FEATURE:
221 <221> NAME/KEY: modified_base
222 <222> LOCATION: (14)..(14)
223 <223> OTHER INFORMATION: m5c
225 <400> SEQUENCE: 14
226 gagaacgctg gaccttccat 20
229 <210> SEQ ID NO: 15
230 <211> LENGTH: 20
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic oligonucleotide
237 <400> SEQUENCE: 15
238 gagaacgatg gaccttccat 20
241 <210> SEQ ID NO: 16
242 <211> LENGTH: 20
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Synthetic oligonucleotide
249 <400> SEQUENCE: 16
250 gagaacgctc cagcactgat 20
253 <210> SEQ ID NO: 17
254 <211> LENGTH: 20
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial sequence
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Synthetic oligonucleotide
261 <400> SEQUENCE: 17
262 tccatgtcgg tcctgatgct 20
265 <210> SEQ ID NO: 18
266 <211> LENGTH: 20
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Synthetic oligonucleotide
274 <220> FEATURE:
275 <221> NAME/KEY: modified_base
276 <222> LOCATION: (12)..(12)
277 <223> OTHER INFORMATION: m5c
279 <400> SEQUENCE: 18
280 tccatgtcgg tcctgatgct 20
283 <210> SEQ ID NO: 19
284 <211> LENGTH: 20
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial sequence

```

## RAW SEQUENCE LISTING

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:31

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

```

288 <220> FEATURE:
289 <223> OTHER INFORMATION: Synthetic oligonucleotide
291 <400> SEQUENCE: 19
292 tccatgacgt tcctgatgct 20
295 <210> SEQ ID NO: 20
296 <211> LENGTH: 20
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic oligonucleotide
303 <400> SEQUENCE: 20
304 tccatgtcgg tcctgctgat 20
307 <210> SEQ ID NO: 21
308 <211> LENGTH: 8
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Synthetic oligonucleotide
315 <400> SEQUENCE: 21
316 tcaacggt 8
319 <210> SEQ ID NO: 22
320 <211> LENGTH: 8
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Synthetic oligonucleotide
327 <400> SEQUENCE: 22
328 tcagcgct 8
331 <210> SEQ ID NO: 23
332 <211> LENGTH: 8
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Synthetic oligonucleotide
339 <400> SEQUENCE: 23
340 tcatcgat 8
343 <210> SEQ ID NO: 24
344 <211> LENGTH: 8
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Synthetic oligonucleotide
351 <400> SEQUENCE: 24
352 tcttcgaa 8
355 <210> SEQ ID NO: 25
356 <211> LENGTH: 7
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial sequence
360 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/023,909C

DATE: 12/27/2006  
TIME: 16:16:32

fyI  
Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt  
Output Set: N:\CRF4\12272006\J023909C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:99; N Pos. 3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24

Seq#:99; N Pos. 25,26,27,34

**VERIFICATION SUMMARY**

DATE: 12/27/2006

PATENT APPLICATION: US/10/023,909C

TIME: 16:16:32

Input Set : A:\C1039.70058US00 - Updated Sequence Listing 12-20-06.txt

Output Set: N:\CRF4\12272006\J023909C.raw

L:1275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0